PUBLISHED: 10-OCT-2019
2020.0 DEFENDER (LE), 419-01B

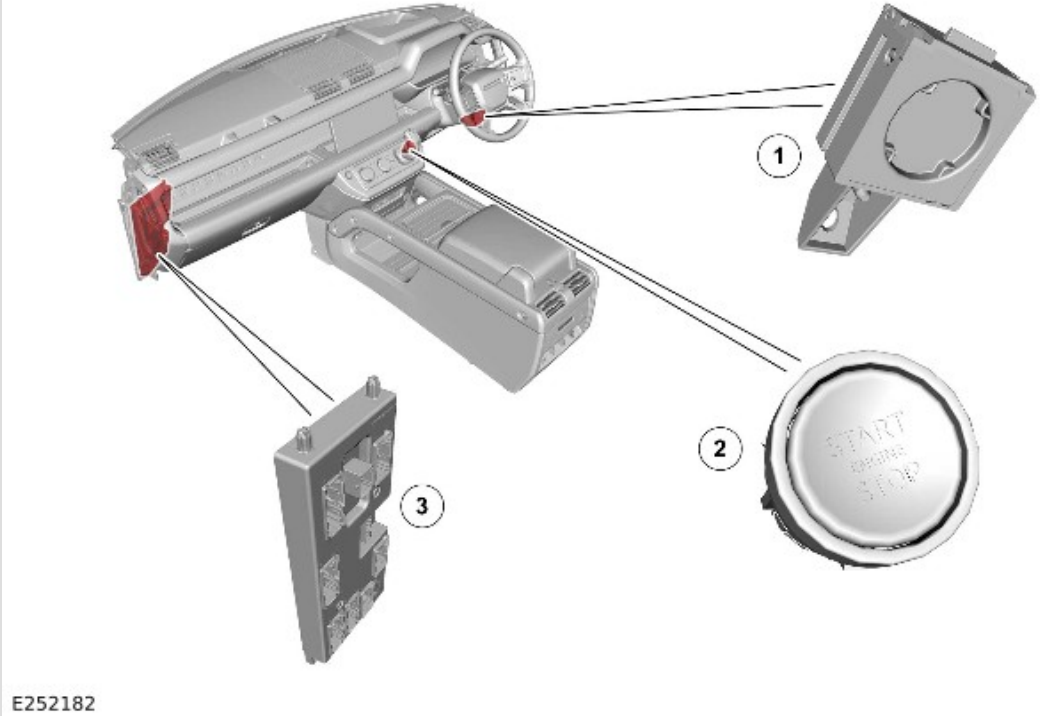
ANTI-THEFT - PASSIVE (G2342566)

COMPONENT LOCATION

COMPONENT LOCATION – 1 OF 4

NOTE:

Right Hand Drive (RHD) vehicle is shown, Left Hand Drive (LHD) vehicle is similar.

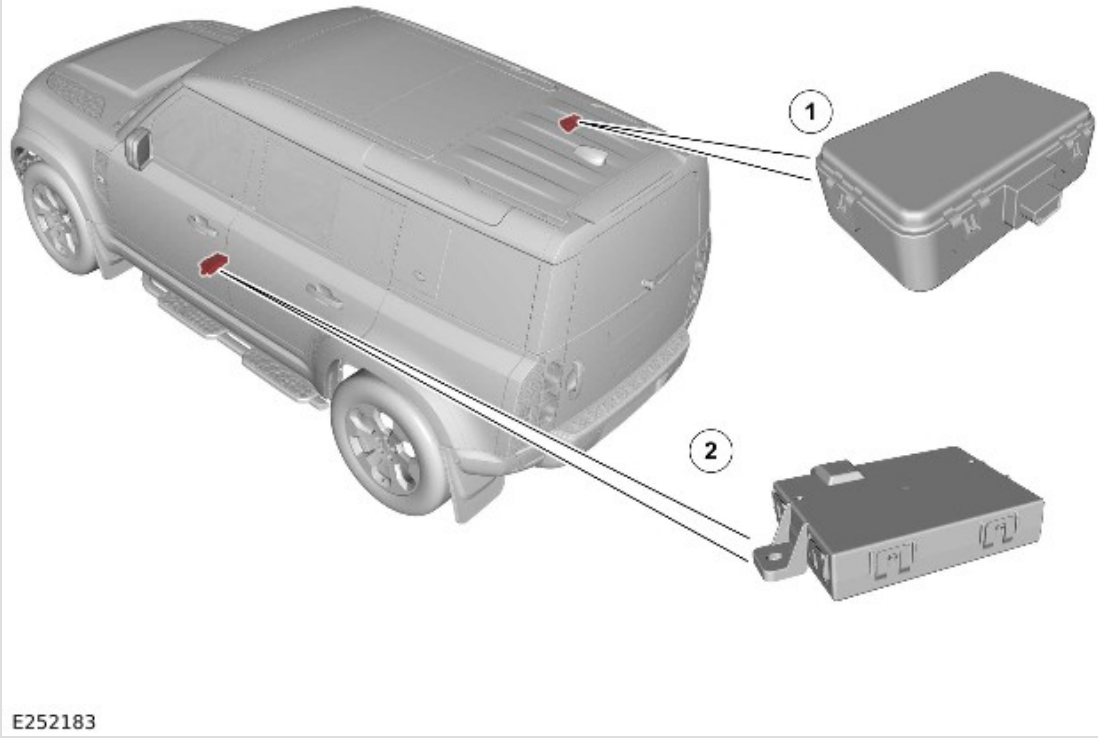


ITEM	DESCRIPTION
1	Immobilizer Antenna Unit (IAU)
2	Ignition switch
3	Body Control Module (BCM)/ Gateway Control Module (GWM)

COMPONENT LOCATION – 2 OF 4

NOTES:

- RHD vehicle is shown, LHD vehicle is similar.
- Vehicle with 5 doors is shown, Vehicle with 3 doors is similar.

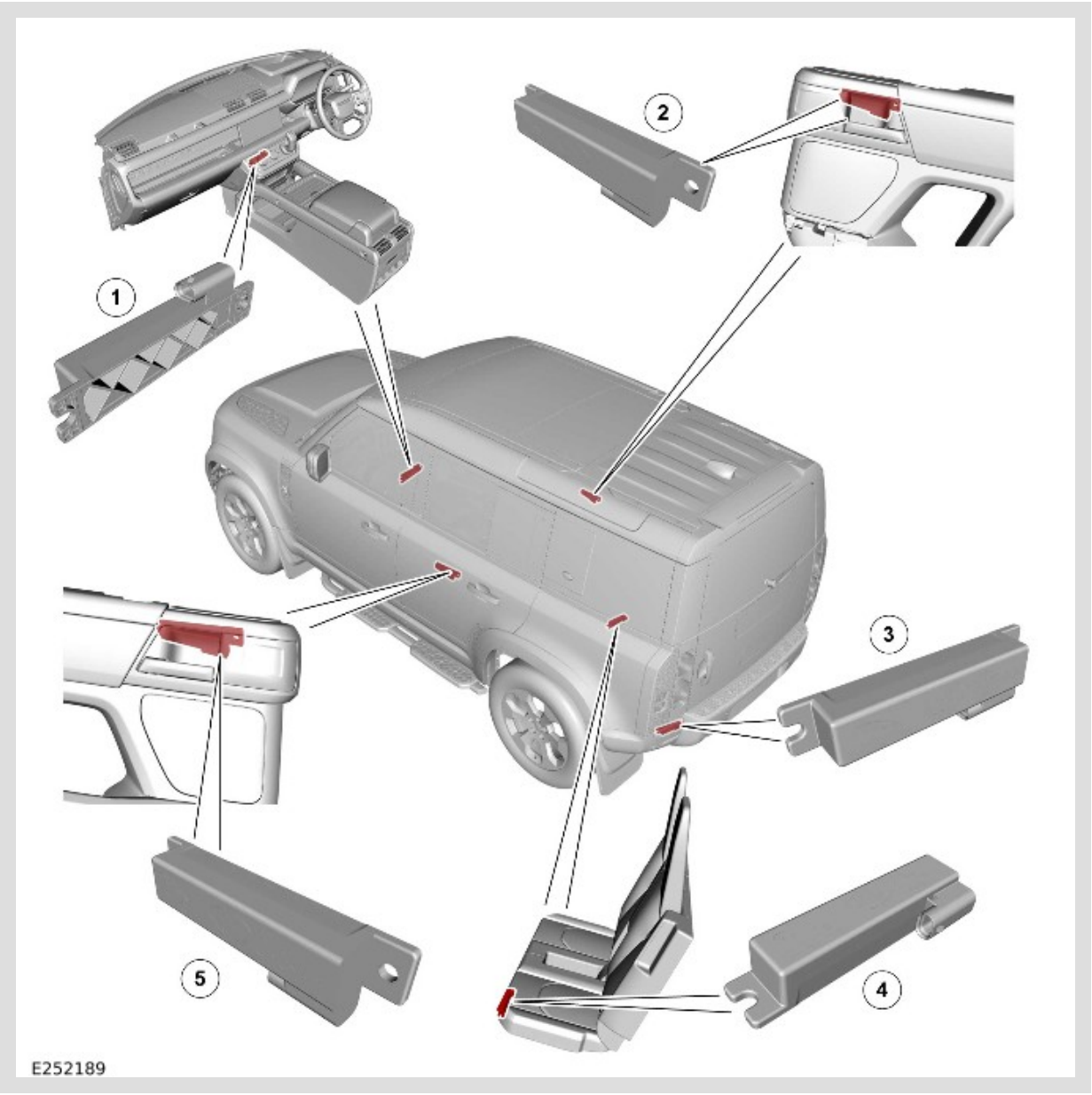


ITEM	DESCRIPTION
1	Radio Frequency (RF) receiver
2	Remote Function Actuator (RFA)

COMPONENT LOCATION – 3 OF 4

NOTES:

- RHD vehicle is shown, LHD vehicle is similar.
- Vehicle with 5 doors is shown, Vehicle with 3 doors is similar.

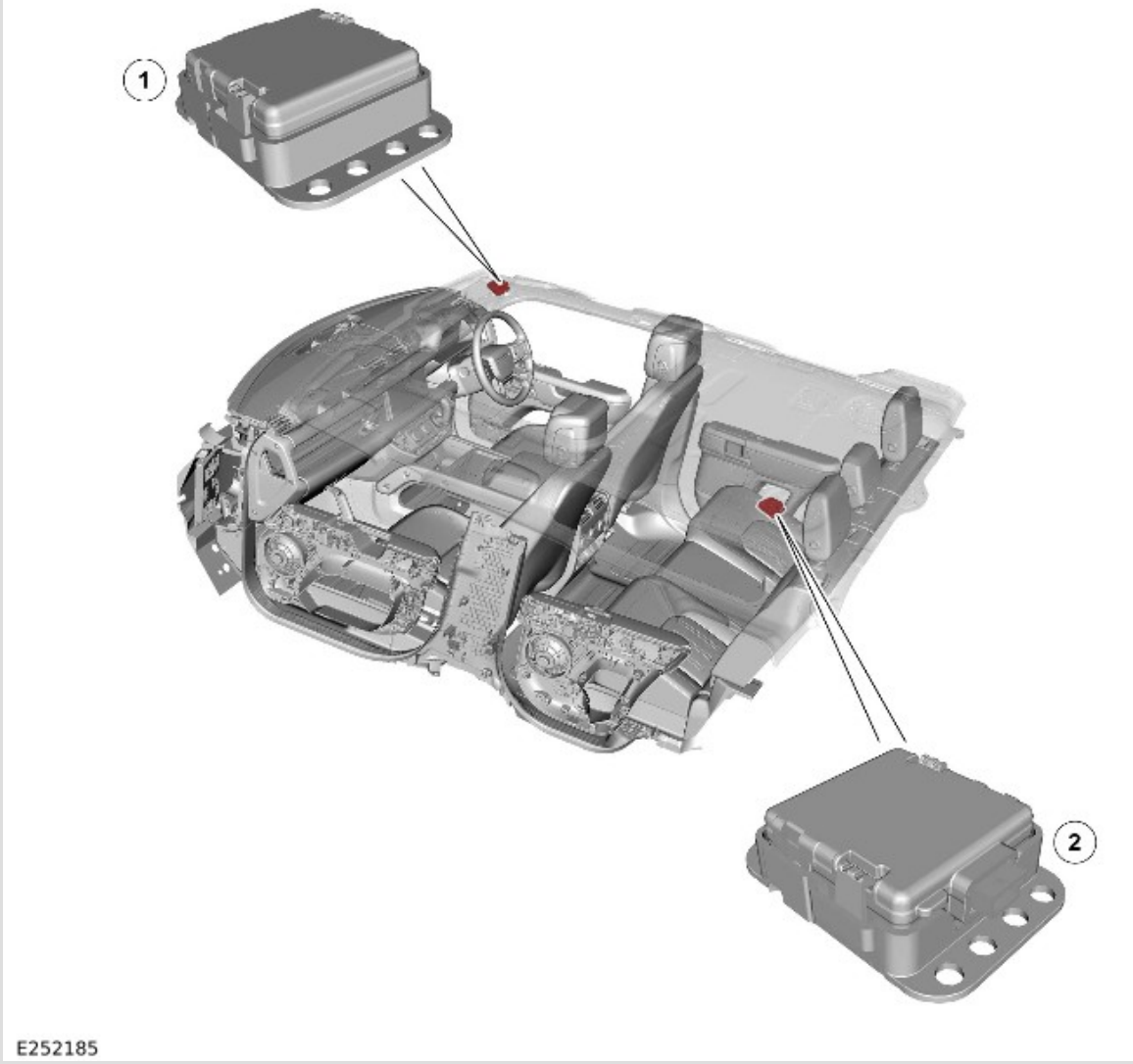


ITEM	DESCRIPTION
1	Low Frequency (LF) - Front passenger compartment
2	LF - Right passenger compartment
3	LF - Left luggage compartment
4	LF - Rear passenger compartment - Only for passive start system
5	LF - Left passenger compartment

COMPONENT LOCATION – 4 OF 4

NOTES:

- RHD vehicle is shown, LHD vehicle is similar.
- Vehicle with 5 doors is shown, Vehicle with 3 doors is similar.



ITEM	DESCRIPTION
1	Passive entry transceiver - Front
2	Passive entry transceiver - Rear

OVERVIEW

The passive start system relies on the detection of a uniquely coded smart key through LF antennas strategically situated within the vehicle. The LF antennas sense when the smart key is in the active transmission zone of the LF antennas. The transmission zone allows the smart key to be detected inside the vehicle. For this reason the orientation and position of the antennas is critical to the correct functioning of the system. The smart key also operates the passive entry system.

For additional information, refer to: Handles, Locks, Latches and Entry Systems (501-14 Handles, Locks, Latches and Entry Systems, Description and Operation).

The passive start system provides a secure interface between the BCM/ GWM and the Powertrain Control Module (PCM). The interface prevents unauthorized starting of the engine. Encoded data exchange between the smart key and multiple control modules immobilizes the engine crank system and the fuel system.

Engine starting is initiated when the encoded data exchange between the smart key and the control modules is verified. The engine management system then allows engine crank and fueling when an authorization data message is received from the BCM/ GWM.

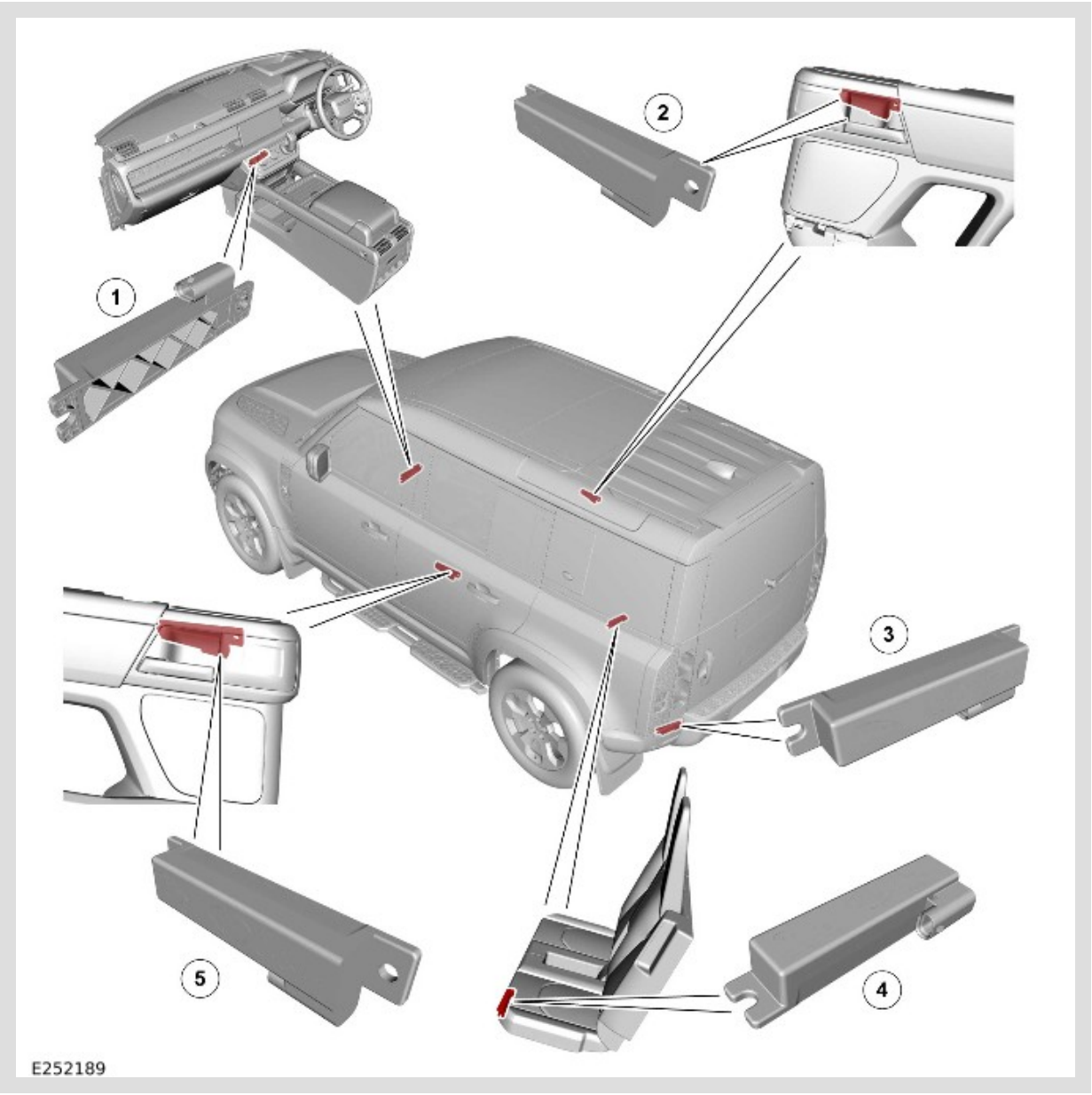
The engine can be started by pressing the ignition switch when PARK position is selected and the brake pedal is pressed.

DESCRIPTION

LF ANTENNAS

NOTES:

- RHD vehicle is shown, LHD vehicle is similar.
- Vehicle with 5 doors is shown, Vehicle with 3 doors is similar.



ITEM	DESCRIPTION
1	LF - Front passenger compartment
2	LF - Right passenger compartment
3	LF - Left luggage compartment
4	LF - Rear passenger compartment - Only for passive start system
5	LF - Left passenger compartment

There are 5 LF antennas for the Passive Entry Passive Start (PEPS) system positioned in the following locations:

- There is 1 LF antenna located in the front floor console.

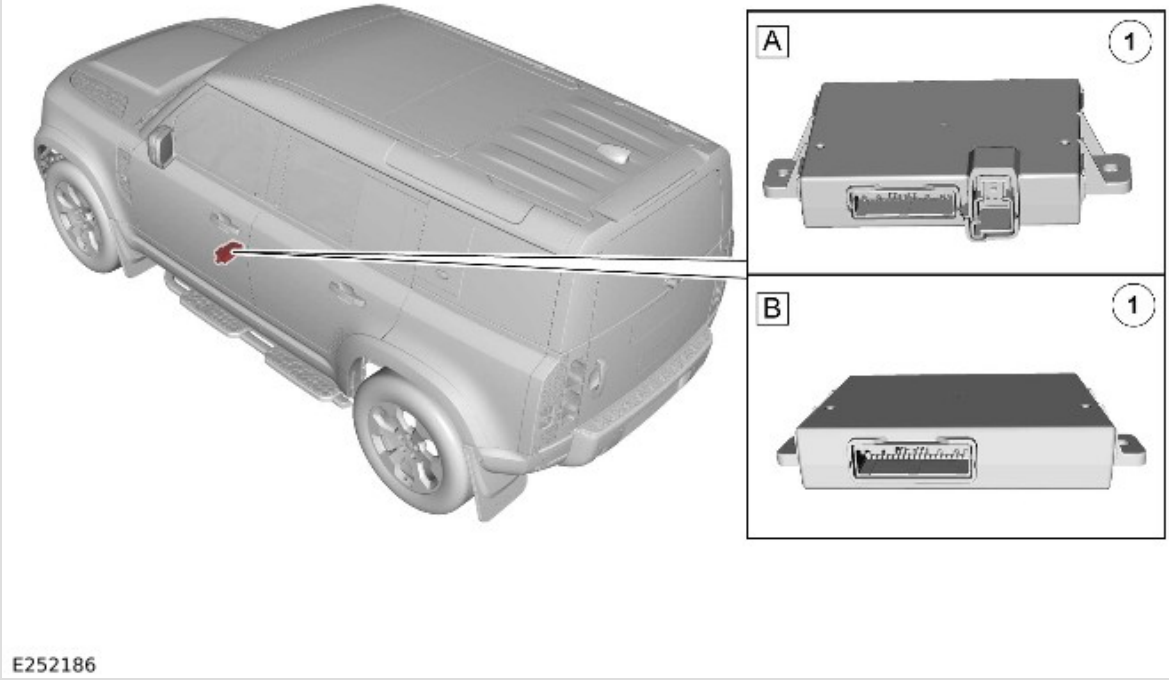
- There is 1 LF antenna located in each rear door.
- There is 1 LF antenna located beneath the third row seats, the antenna only for passive start system.
- There is 1 LF antenna located behind the rear bumper.

The RFA transmits a LF signal through the antennas which is received by the smart key. The smart key then responds by transmitting a RF signal which is received by the RF receiver. The RF receiver sends the signal to the RFA.

RFA

NOTES:

- Vehicle with 5 doors is shown. Vehicle with 3 doors is similar.
- Before you configure a new RFA, put ALL the vehicle keys on the center console.



ITEM	DESCRIPTION
A	Vehicles with PEPS system
B	Vehicles with passive start system
1	RFA

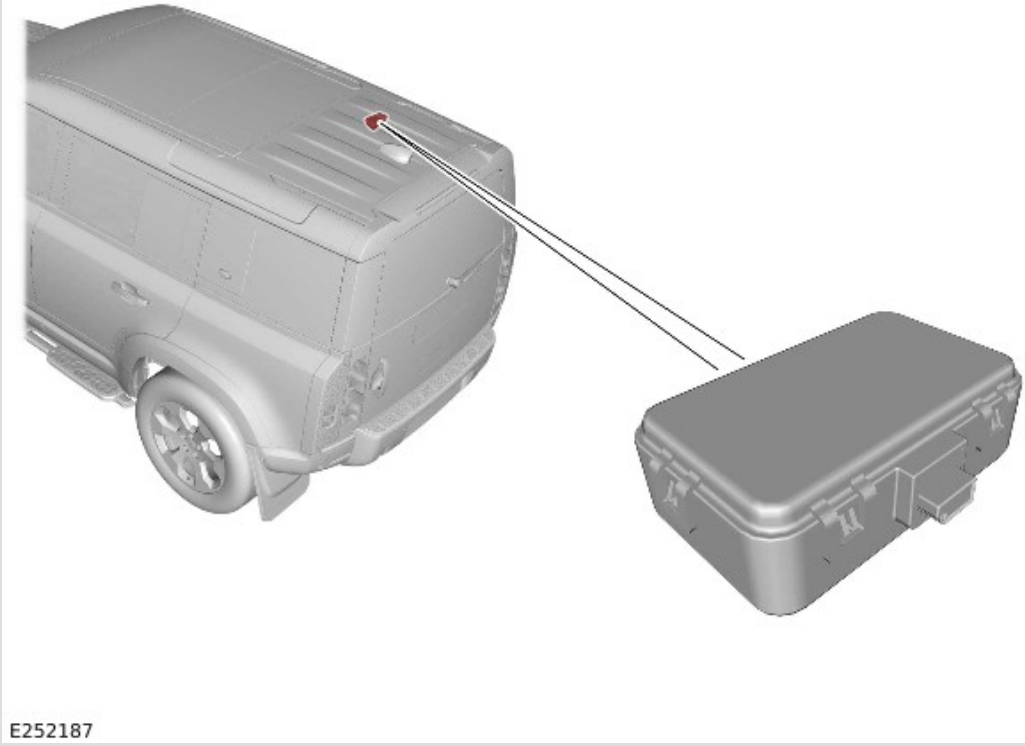
The RFA is located in the below of the front left seat.

The RFA controls signal transmissions to and from the smart key and provides authorization to allow the vehicle to be unlocked and started. The RFA has a High Speed (HS) Controller Area Network (CAN) body systems bus connection to the BCM/ GWM.

RF RECEIVER

NOTE:

Vehicle with 5 doors is shown. Vehicle with 3 doors is similar.



The RF receiver is located in the rear headliner.

The RF receiver receives RF signals from the smart key. When the RF receiver receives a signal from the smart key, the RF receiver passes the signal to the RFA.

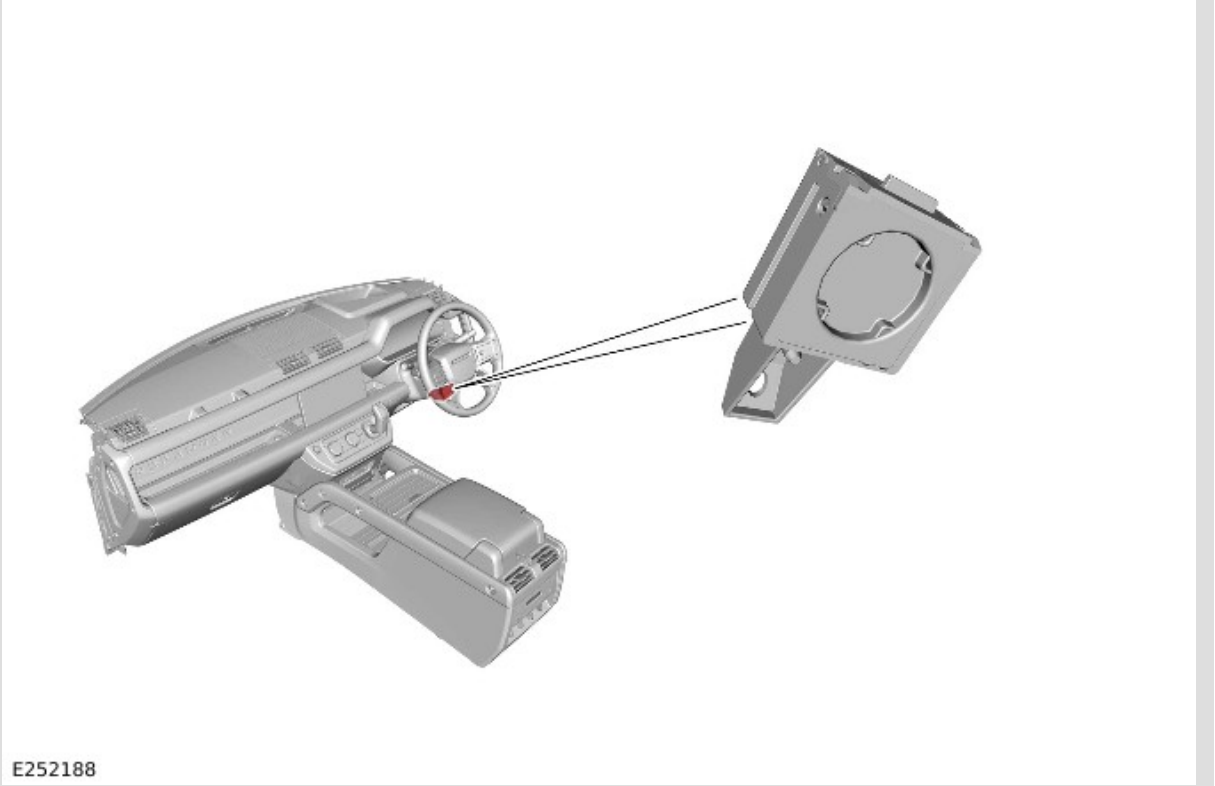
There are 2 types of RF receiver available as detailed in the table below.

Part No. suffix	Operating frequency	Vehicle specification
A#	315 MHz	North American Specification (NAS), Japan and Korea
B#	433 MHz	Europe and Rest of World (ROW)

IAU

NOTE:

RHD vehicle is shown, LHD vehicle is similar.



The IAU is installed underneath of the lower steering column cover and secured with a screw, for both auto and manual columns.

The IAU is used when the RFA is unable to authorize the smart key.

The RFA is unable to identify the smart key when the smart key battery voltage is low or there is RF interference.

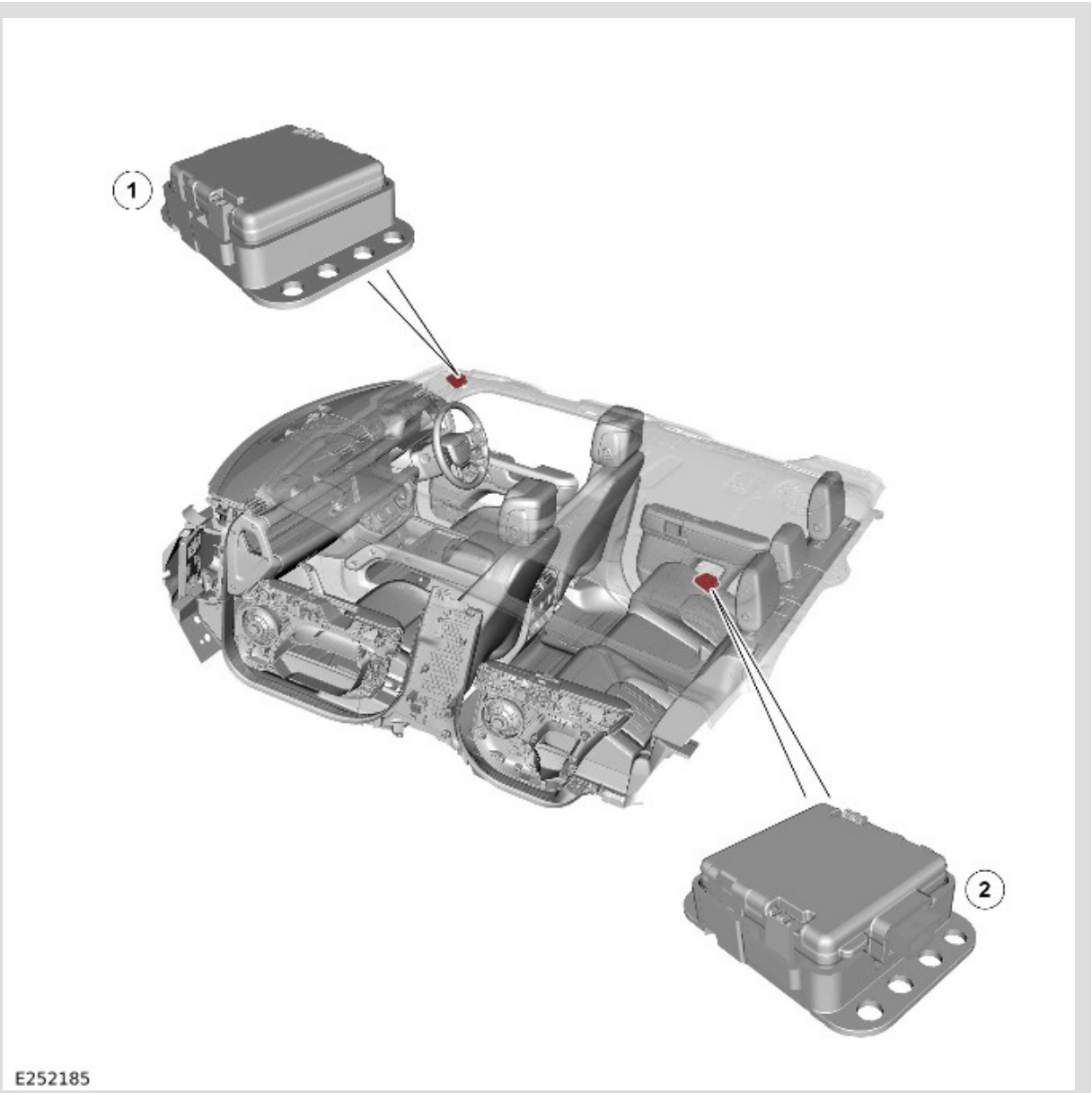
The transponder within the smart key can be read in the conventional manner.

The driver is alerted to this by an audible chime and a message is displayed in the Instrument Panel Cluster (IPC). The message is 'Place Smart Key as shown, and press start button'.

PASSIVE ENTRY TRANSCEIVER

NOTES:

- RHD vehicle is shown, LHD vehicle is similar.
- Vehicle with 5 doors is shown, Vehicle with 3 doors is similar.



ITEM	DESCRIPTION
1	Passive entry transceiver - Front
2	Passive entry transceiver - Rear

There are 2 passive entry transceivers in a vehicle, 1 on the front headliner and the other on the rear of the headliner. The passive entry transceivers are used to locate the position of the smart key from the vehicle. The passive entry transceivers communicate with the RFA through a Local Interconnect Network (LIN). Each passive entry transceiver has a power supply from the Rear Junction Box (BCMB) and a ground connection. When the passive start sequence is initiated and a smart key is detected, the passive entry transceivers calculate the distance of the smart key. Then the RFA allows the authorization of the smart key only when this distance is within permissible limits.

NOTE:

The passive entry transceivers are only equipped on PEPS vehicles, and ultra wide band in permitted markets. When the passive entry transceivers are not equipped, the RFA performs the smart key authentication through LF challenge to the smart key. The responses from the smart key are received through the RF receiver.

The passive entry transceivers are also involved with the passive entry system.

For additional information, refer to: Handles, Locks, Latches and Entry Systems (501-14 Handles, Locks, Latches and Entry Systems, Description and Operation).

PEPS SYSTEM

NOTE:

The smart key does not need to be held adjacent to the IAU. However this function is still supported to cover error states.

The PEPS system includes enhancements to further improve vehicle security.

The smart key includes ultra wide band technology. Ultra wide band technology includes 2 new passive entry transceivers, which are programed to the vehicle in conjunction with smart keys.

OPERATION

PASSIVE START SYSTEM

The RFA prompts each of the internal LF antennas to output a signal. When the smart key is in the passenger compartment, the smart key detects the LF signals. The smart key responds with a data identification signal back to the RF receiver. The RF receiver sends the data identification signals to the RFA.

In addition the RFA sends a separate challenge, through the passive entry transceivers to the smart key. The RFA sends this data to authenticate and obtain the smart key position with accuracy.

When the data received matches that stored in the RFA, the RFA continues the passive start process by communicating a 'smart key valid' signal. The valid signal is received by the BCM/ GWM through the HS CAN body systems bus.

The BCM/ GWM receives the authorization and confirms the response with an internal calculation. The BCM/ GWM passes coded data to the IPC on the HS CAN Human Machine Interface (HMI) systems bus. Upon confirmation from the IPC, Power Mode 6 (ignition ON) is enabled.

The BCM/ GWM exchanges encrypted data with the Electric Steering Column Lock Control Module (VIM) mechanism. The data authorizes the unlocking of the steering column. The IPC only provides a ground for the VIM motor. The BCM / GWM then sends a mobilization signal to the PCM.

The BCM/ GWM enables the fuel pump relay which provides a startup battery voltage supply to the Fuel Pump Driver Module (FPDM).

When the RFA fails to locate the smart key, a message is displayed in the IPC message center. The message is 'Place Smart Key as shown, and press start button'.

The keyless start backup process must be used to mobilize and start the vehicle.

PASSIVE START BACKUP

When the vehicle is unlocked with the emergency key or the vehicle does not detect a smart key. Using the passive start backup procedure is then necessary for the following:

- Disarm the alarm
- Start the engine.

The following passive start backup process must be followed in this event:

- Pressing the ignition switch when the RFA fails to locate the smart key. 'Place Smart Key as shown, and press start button' appears in the IPC message center.
- For vehicles with a manual or powered steering column, position the smart key under the lower steering column cowl. The switches on the smart key must face outwards.
- Pressing the ignition switch with the brake pedal pressed to start the engine.

> **NOTE:**
>
> When the 'Place Smart Key as shown, and press start button' message is no longer displayed (only displayed for 10 seconds), the sequence has to be repeated.

The process bypasses the data exchange between the RFA and the BCM/ GWM. The process is an inductive process and operates even if the battery in the smart key is discharged. A transponder within the smart key is detected by the IAU. The IAU communicates this code with the BCM/ GWM through a LIN connection. The BCM/ GWM then initiates the vehicle start process in the normal manner.

ULTRA WIDE BAND OPERATION

With the introduction of ultra wide band technology, recognizing the position of the smart key requires 2 pieces of distance information. The 2 passive entry transceivers are located in the headliner, 1 at the front and 1 at the rear. The passive entry transceivers enable full coverage inside and outside of the vehicle.

The following process takes place to validate the smart key:

- The RFA receives a door lock/unlock request.
- When the RFA receives the door lock/unlock request, it sends out the challenge data through the LF antenna to the smart key. The data is sent at 125 kHz.

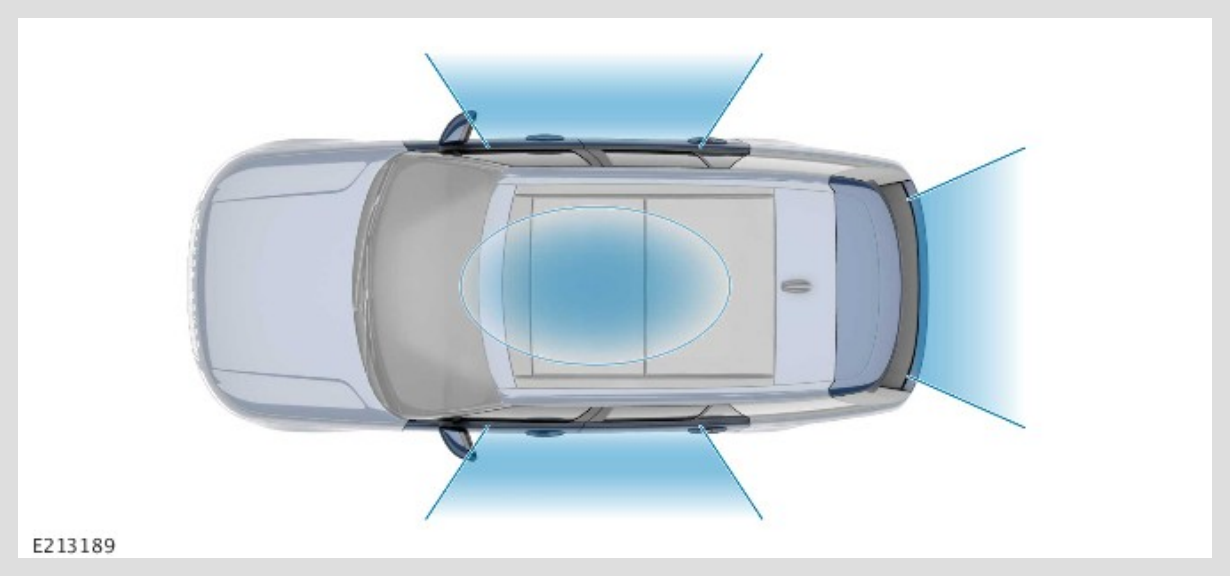
- The smart key responds to the LF signal, processing the received message and replies to the vehicle using a separate RF channel. Depending on market the RF channels are 433 MHz or 315 MHz.
- This response is received by the RF receiver.

In addition the RFA sends a separate challenge, through the passive entry transceivers to the smart key. The RFA sends this data to authenticate and obtain the smart key position with accuracy, using the following process:

- The challenge data is sent from the RFA through a LIN to the passive entry transceivers.
- The passive entry transceivers process and transmit the data, through a separate RF signal, at 3.99 GHz (4.5 GHz in China) to the smart key.
- On receipt of the signal the smart key responds with an authentication message back to the passive entry transceivers. The smart key responds by a RF signal through the LIN connection.

When the smart key is validated the system operates normally.

LOW FREQUENCY ZONES



The message contained in the beacon signals varies based on each transmitter zone. For example, the message varies based on when the zone is:

- Inside or outside the vehicle.
- The driver side, passenger side or the loadspace.

The capability allows the smart key to send specific answers, triggering actions such as opening the passenger door or starting the engine.

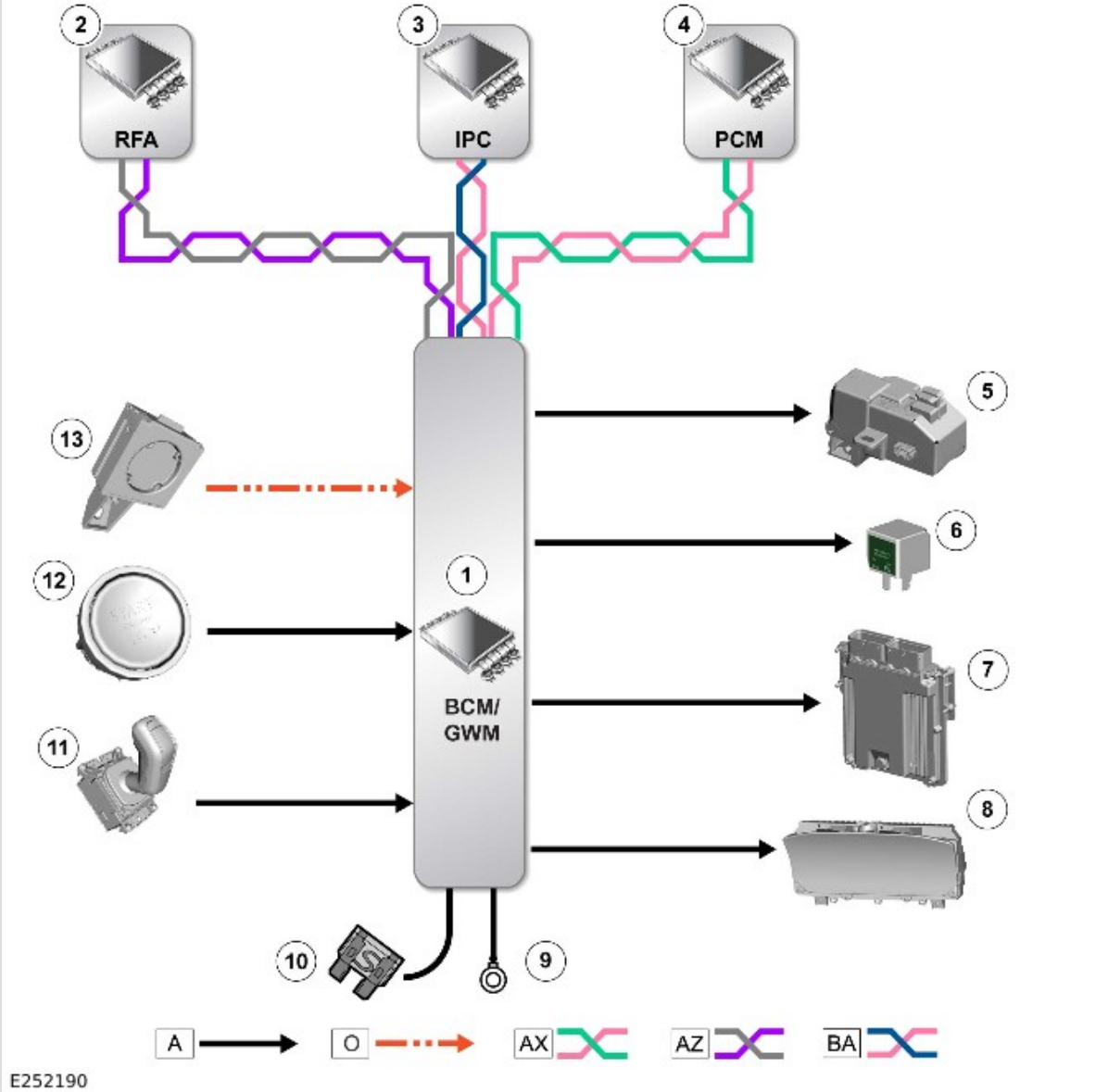
DIAGNOSTICS

The BCM/ GWM records any Diagnostic Trouble Code(s) (DTC) and related data. The DTC and related data are read using the Jaguar Land Rover (JLR) approved diagnostic equipment.

The JLR approved diagnostic equipment enables certain components to be activated and also read live data.

CONTROL DIAGRAM

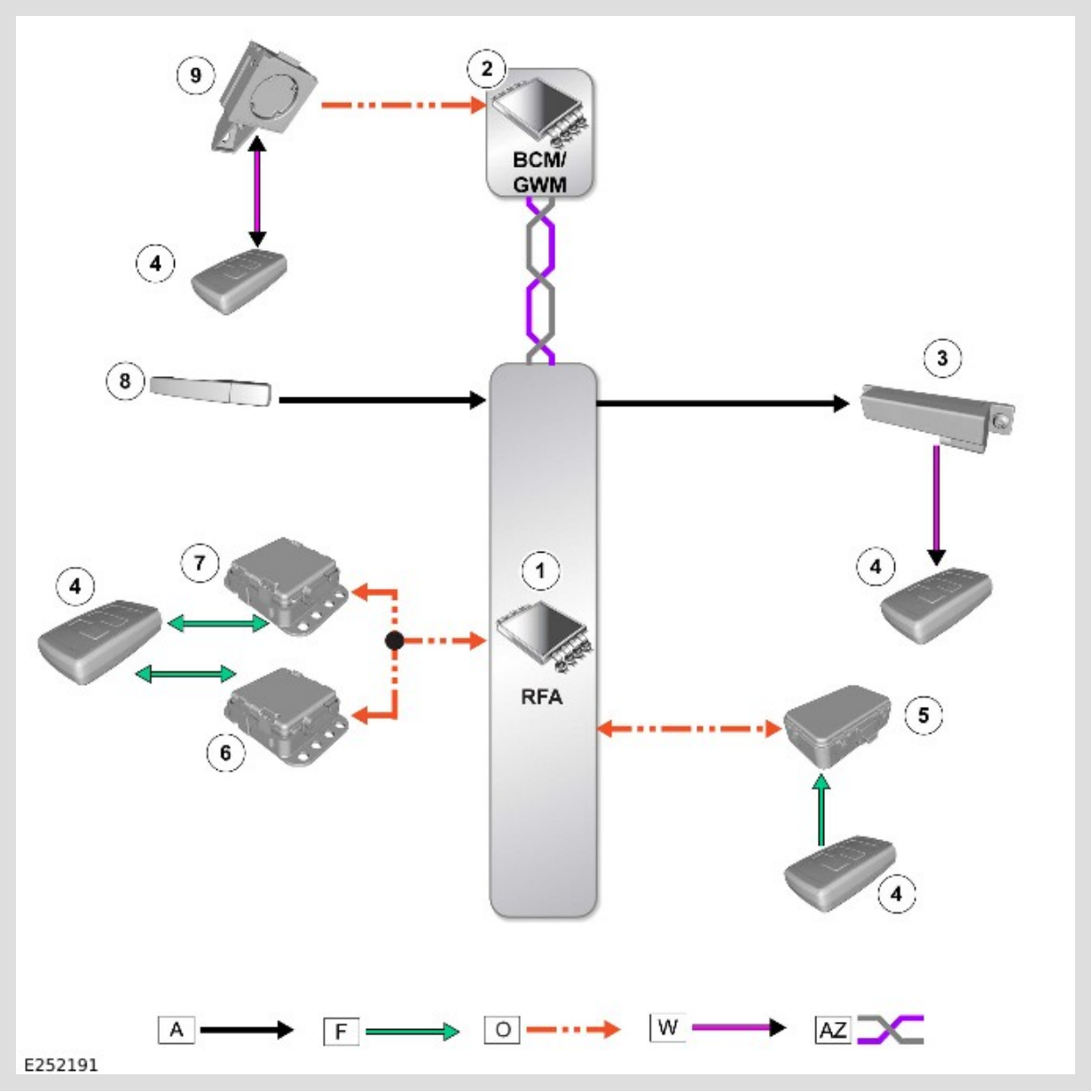
CONTROL DIAGRAM – 1 OF 2 – PASSIVE START



A = HARDWIRED: O = LIN: AX = FLEXRAY: AZ = HS CAN BODY SYSTEM BUS: BA = HS CAN HMI SYSTEM BUS.

ITEM	DESCRIPTION
1	BCM/ GWM
2	RFA
3	IPC
4	PCM
5	VIM
6	Fuel pump relay
7	PCM
8	IPC
9	Ground
10	Power supply
11	Transmission Control Switch (TCS)
12	Ignition switch
13	IAU

CONTROL DIAGRAM – 2 OF 2 – SMART KEY RECOGNITION AND DETECTION



A = HARDWIRED: F = RF TRANSMISSION: O = LIN: W = LF TRANSMISSION: AZ = HS CAN BODY SYSTEMS BUS.

ITEM	DESCRIPTION
1	RFA
2	BCM/ GWM
3	LF antenna (quantity 6)
4	Smart key
5	RF receiver

ITEM	DESCRIPTION
6	Passive entry transceiver - Front
7	Passive entry transceiver - Rear
8	Lock/unlock request - Door handle
9	IAU

cmljaGFyZG1vcnRvbjsyMDIwLTA5LTE4VDExOjE5OjQ0Ljg3NFo7OTIuNDAuMTg5LjUzOw==

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2020.0 DEFENDER (LE), 419-01B

ANTI-THEFT - PASSIVE (G2401030)

DIAGNOSIS AND TESTING

PRINCIPLES OF OPERATION

For a detailed description of the anti-theft - passive system and operation, refer to the relevant description and operation section of the workshop manual. REFER to: Anti-Theft - Passive (419-01B Anti-Theft - Passive, Description and Operation).

INSPECTION AND VERIFICATION

CAUTION:

Diagnosis by substitution from a donor vehicle is **NOT** acceptable. Substitution of control modules does not guarantee confirmation of a fault, and may also cause additional faults in the vehicle being tested and/or the donor vehicle.

1. Verify the customer concern
2. Visually inspect for obvious signs of damage and system integrity

Visual Inspection

MECHANICAL	ELECTRICAL
■ Start/stop button ■ Electric steering column lock ■ Vehicle key	■ Fuses ■ Electrical harnesses ■ Harness connectors ■ Vehicle key battery ■ Central junction box (controls +12Volt supply to electric steering column lock and software logic for electric steering column lock control) ■ Instrument cluster (provides electrical ground circuit to electric steering column lock) ■ Controller Area Network (CAN) circuits

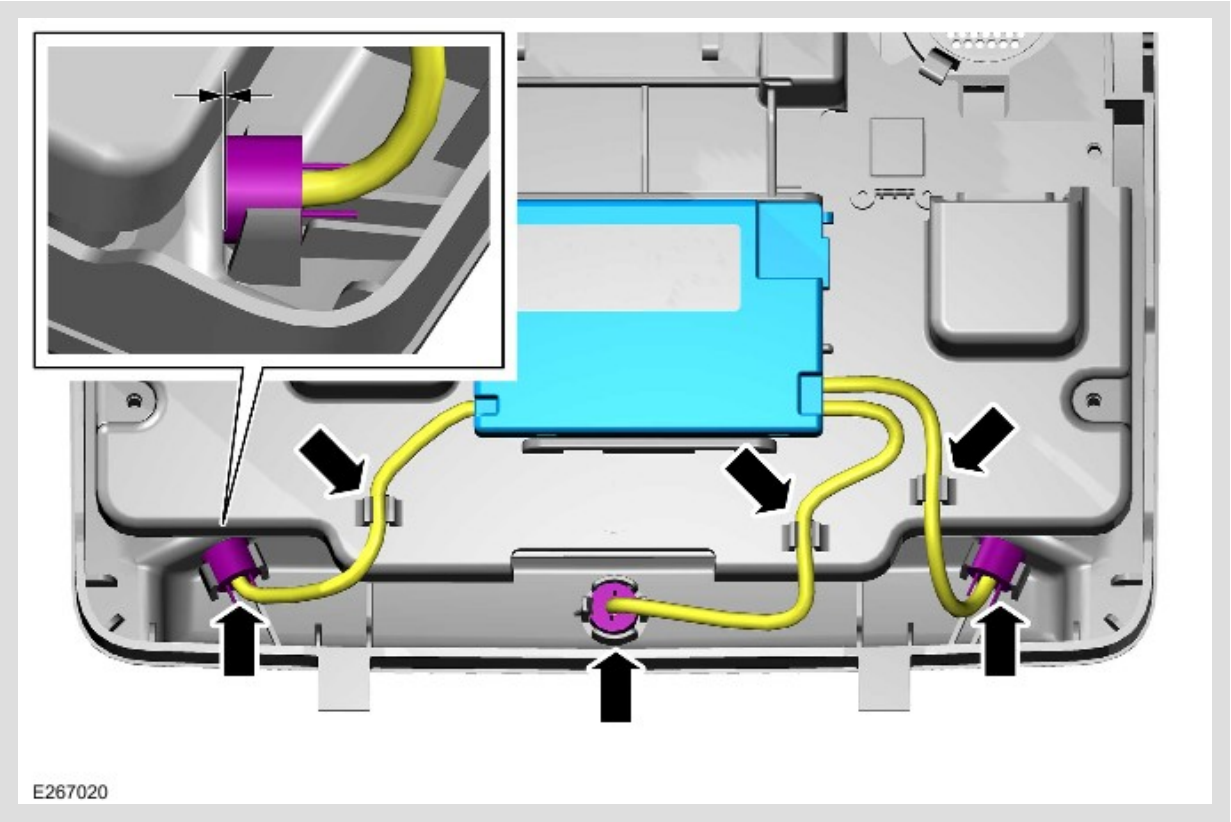
3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step
4. If the cause is not visually evident check for Diagnostic Trouble Code(s) (DTC)s and refer to the DTC index

SYMPTOM CHART

SYMPTOM	POSSIBLE CAUSES	ACTION
False alarm triggers - Volumetric sensor identified as last known alarm trigger	■ Genuine movement detected, no further action required ■ Water ingress into the volumetric sensor /connectors ■ Poor installation of the volumetric sensor (false trigger) ■ Sensor internal failure	**NOTES:** ■ Confirm if the vehicle has been checked previously for the same concern or wether this is the first visit to a retailer ■ Make sure to take a recording of the alarm trigger history and add this to the warranty claim ■ Check with the customer to establish wether the vehicle is parked near air force bases or other locations where the vehicle could be subject to loud noises (jets flying overhead, tractors driving very close by) ■ Inspect the area of the volumetric sensor for any evidence of water leaks and rectify as necessary ■ Check the installation of the volumetric sensor, remove and reinstall the sensor making sure all connections are secure and the sensor is correctly installed ■ If there have been repeat visits for false alarm triggers install a new volumetric sensor

CORRECT INSTALLATION OF THE VOLUMETRIC SENSOR

The volumetric sensor is located in a central position in the overhead console. The volumetric sensor allows the interior of the vehicle to be monitored when the vehicle is double locked. In cases where customers have reported "false-alarm" triggers of the vehicle anti-theft alarm and where the volumetric sensor has been identified as the last known alarm trigger (see diagnostic instructions below), this may indicate an issue with the installation of the volumetric sensor rather than an internal failure of the sensor itself.



In light of this, when first faced with this issue, the existing volumetric sensor should be carefully removed and refitted. Care should be taken to make sure that the sensor and associated connectors are installed correctly and securely. See illustration and video for correct installation, when installed conduct 'push-pull-push' on connections to make sure of correct engagement. Make sure the sensors are pushed fully home and abut against the console, there should be equal placement all around the sensor and it should not be angled when compared to the surface of the console, no large visible gap should be seen and any small gap should be equal all around the sensor when viewed from the front and the rear of the console, use a flashlight to aid with gap visibility, REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation).

If the issue reoccurs after refitting of the volumetric sensor, then the sensor should be replaced.

READING ALARM TRIGGER HISTORY THROUGH PATHFINDER DIAGNOSTICS

NOTE:

Make sure to take a recording of the alarm trigger history and add this to the warranty claim

To determine the details of recent anti-theft alarm triggers on Pathfinder vehicles, the following steps should be followed:

1. Using the Jaguar Land Rover approved diagnostic equipment, connect to the vehicle through the Vehicle Communication Interface (VCI) unit

2. Load in the Vehicle Identification Number (VIN)

3. SELECT 'ECU Diagnostics'

4. SELECT 'Body Control Module (BCM)'

5. SELECT 'ECU Functions From List'

6. SELECT 'Alarm Trigger History' and follow on-screen instructions to view recent alarm trigger history

DTC INDEX

For a list of DTCs that could be set on this vehicle, please refer to Section 100-00. REFER to:(100-00 General Information)

Diagnostic Trouble Code Index - DTC: Body Control Module (BCM) (Description and Operation),
Diagnostic Trouble Code Index - DTC: Remote Function Actuator (RFA) (Description and Operation).

cmljaGFyZG1vcnRvbjsyMDIwLTA5LTE4VDExOjIwOjIwLjU1OVo7OTIuNDAuMTg5LjUzOw==

PUBLISHED: 10-JUL-2020
2020.0 DEFENDER (LE), 419-01B

ANTI-THEFT - PASSIVE (G2401030)

DIAGNOSIS AND TESTING

PRINCIPLES OF OPERATION

For a detailed description of the anti-theft - passive system and operation, refer to the relevant description and operation section of the workshop manual. REFER to: Anti-Theft - Passive (419-01B Anti-Theft - Passive, Description and Operation).

INSPECTION AND VERIFICATION

CAUTION:

Diagnosis by substitution from a donor vehicle is **NOT** acceptable. Substitution of control modules does not guarantee confirmation of a fault, and may also cause additional faults in the vehicle being tested and/or the donor vehicle.

1. Verify the customer concern
2. Visually inspect for obvious signs of damage and system integrity

Visual Inspection

MECHANICAL	ELECTRICAL
■ Start/stop button ■ Electric steering column lock ■ Vehicle key	■ Fuses ■ Electrical harnesses ■ Harness connectors ■ Vehicle key battery ■ Central junction box (controls +12Volt supply to electric steering column lock and software logic for electric steering column lock control) ■ Instrument cluster (provides electrical ground circuit to electric steering column lock) ■ Controller Area Network (CAN) circuits

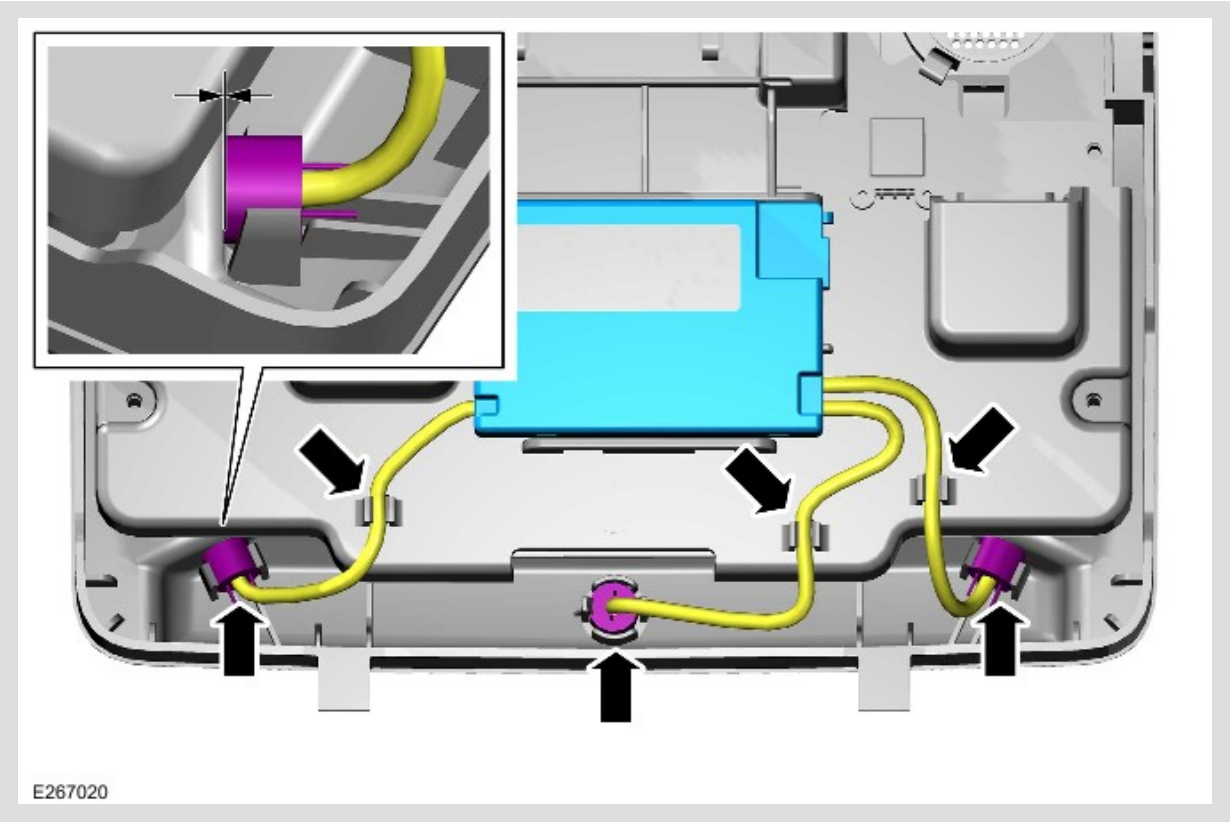
3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step
4. If the cause is not visually evident check for Diagnostic Trouble Code(s) (DTC)s and refer to the DTC index

SYMPTOM CHART

SYMPTOM	POSSIBLE CAUSES	ACTION
False alarm triggers - Volumetric sensor identified as last known alarm trigger	■ Genuine movement detected, no further action required ■ Water ingress into the volumetric sensor /connectors ■ Poor installation of the volumetric sensor (false trigger) ■ Sensor internal failure	**NOTES:** ■ Confirm if the vehicle has been checked previously for the same concern or wether this is the first visit to a retailer ■ Make sure to take a recording of the alarm trigger history and add this to the warranty claim ■ Check with the customer to establish wether the vehicle is parked near air force bases or other locations where the vehicle could be subject to loud noises (jets flying overhead, tractors driving very close by) ■ Inspect the area of the volumetric sensor for any evidence of water leaks and rectify as necessary ■ Check the installation of the volumetric sensor, remove and reinstall the sensor making sure all connections are secure and the sensor is correctly installed ■ If there have been repeat visits for false alarm triggers install a new volumetric sensor

CORRECT INSTALLATION OF THE VOLUMETRIC SENSOR

The volumetric sensor is located in a central position in the overhead console. The volumetric sensor allows the interior of the vehicle to be monitored when the vehicle is double locked. In cases where customers have reported "false-alarm" triggers of the vehicle anti-theft alarm and where the volumetric sensor has been identified as the last known alarm trigger (see diagnostic instructions below), this may indicate an issue with the installation of the volumetric sensor rather than an internal failure of the sensor itself.



In light of this, when first faced with this issue, the existing volumetric sensor should be carefully removed and refitted. Care should be taken to make sure that the sensor and associated connectors are installed correctly and securely. See illustration and video for correct installation, when installed conduct 'push-pull-push' on connections to make sure of correct engagement. Make sure the sensors are pushed fully home and abut against the console, there should be equal placement all around the sensor and it should not be angled when compared to the surface of the console, no large visible gap should be seen and any small gap should be equal all around the sensor when viewed from the front and the rear of the console, use a flashlight to aid with gap visibility, REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation).

If the issue reoccurs after refitting of the volumetric sensor, then the sensor should be replaced.

READING ALARM TRIGGER HISTORY THROUGH PATHFINDER DIAGNOSTICS

NOTE:

Make sure to take a recording of the alarm trigger history and add this to the warranty claim

To determine the details of recent anti-theft alarm triggers on Pathfinder vehicles, the following steps should be followed:

1. Using the Jaguar Land Rover approved diagnostic equipment, connect to the vehicle through the Vehicle Communication Interface (VCI) unit

2. Load in the Vehicle Identification Number (VIN)

3. SELECT 'ECU Diagnostics'

4. SELECT 'Body Control Module (BCM)'

5. SELECT 'ECU Functions From List'

6. SELECT 'Alarm Trigger History' and follow on-screen instructions to view recent alarm trigger history

DTC INDEX

For a list of DTCs that could be set on this vehicle, please refer to Section 100-00. REFER to:(100-00 General Information)

Diagnostic Trouble Code Index - DTC: Body Control Module (BCM) (Description and Operation),
Diagnostic Trouble Code Index - DTC: Remote Function Actuator (RFA) (Description and Operation).

cmljaGFyZG1vcnRvbjsyMDIwLTA5LTE4VDExOjIxOjIyLjI4N1o7OTIuNDAuMTg5LjUzOw==

PUBLISHED: 04-OCT-2019
2020.0 DEFENDER (LE), 419-10

MULTIFUNCTION ELECTRONIC MODULES

REMOTE FUNCTION ACTUATOR (G2401031)

DIAGNOSIS AND TESTING

PRINCIPLES OF OPERATION

For a detailed description of the keyless vehicle system, refer to the relevant description and operation sections in the workshop manual.

INSPECTION AND VERIFICATION

CAUTION:

Diagnosis by substitution from a donor vehicle is **NOT** acceptable. Substitution of control modules does not guarantee confirmation of a fault, and may also cause additional faults in the vehicle being tested and/or the donor vehicle.

NOTES:

- If a control module or a component may be at fault and the vehicle remains under manufacturer warranty, refer to the Warranty Policy and Procedures manual, or determine if any prior approval program is in operation, prior to the installation of a new module/component.
- When performing voltage or resistance tests, always use a digital multimeter that has the resolution ability to view 3 decimal places. For example, on the 2 volts range can measure 1mV or 2 K Ohm range can measure 1 Ohm. When testing resistance always take the resistance of the digital multimeter leads into account.
- Check and rectify basic faults before beginning diagnostic routines involving pinpoint tests.

1. Verify the customer concern

2. Visually inspect for obvious signs of damage and system integrity

Visual Inspection

MECHANICAL	ELECTRICAL

MECHANICAL	ELECTRICAL
■ Misaligned door(s), hood or luggage compartment lid ■ Door latch(s) ■ Actuating rod(s) ■ Exterior door handle(s) ■ Interior door handle(s) ■ Door lock cylinder ■ Cable(s) ■ Door mirror - Power fold ■ Auto stop/start switch ■ Luggage compartment lid exterior release switch	■ Fuse(s) ■ Wiring harness ■ Electrical connector(s) ■ Door lock actuator(s) ■ Remote transmitter batteries ■ Startup battery ■ Remote transmitter (Key-fob or smart key) ■ Door lock switch(s) ■ Body control module (BCM) ■ Radio frequency (RF) receiver ■ Immobilizer antenna unit (IAU) ■ Remote Function Actuator (RFA) ■ Instrument cluster (IC) ■ Auto stop/start switch ■ Hazard warning lamp switch ■ Low frequency antenna (LF antenna)

3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step

4. If the cause is not visually evident, check for diagnostic trouble codes (DTCs) and refer to the DTC index

5. Check JLR claims submission system for open campaigns. Refer to the corresponding bulletins and SSMs which may be valid for the specific customer complaint and complete the recommendations as required

DTC INDEX

For a list of diagnostic trouble codes that could be set on this vehicle, please refer to Section 100-00. REFER to: Diagnostic Trouble Code Index - DTC: Remote Function Actuator (RFA) (100-00 General Information, Description and Operation).

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